

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY



To:

see form PCT/ISA/220

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/US2004/004788

International filing date (day/month/year)  
18.02.2004

Priority date (day/month/year)  
18.02.2003

International Patent Classification (IPC) or both national classification and IPC  
H04Q7/38, H04L12/58

Applicant  
QUAL.COMM INCORPORATED

### 1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

### 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/US2004/004788

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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
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**Box No. II Priority**

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1. ☒ The following document has not been furnished:

- ☒ copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)).
- ☐ translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

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**Box No. V Reasoned statement under Rule 43b/s.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	1-51
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-51
Industrial applicability (IA)	Yes: Claims	1-51
	No: Claims	

2. Citations and explanations

**see separate sheet**

Re Item V.

- 1 The following documents are referred to in this communication:

D1 : EP-A-1 257 140 (LUCENT TECHNOLOGIES INC) 13 November 2002  
(2002-11-13)

D2 CHAKRAVARTY S ET AL: "An Algorithm for Reverse Traffic Channel Rate Control for cdma2000 High Rate Packet Data Systems" GLOBECOM'01. 2001 IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE. SAN ANTONIO, TX, NOV. 25 - 29, 2001, IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE, NEW YORK, NY : IEEE, US, vol. VOL. 6 OF 6, 25 November 2001 (2001-11-25), pages 3733-3737, XP002277693, ISBN: 0-7803-7206-9

- 2 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1-51 is not inventive in the sense of Article 33(3) PCT.

- 2.1 Regarding claim 1, document D1 discloses (the references in parenthesis applying to this document): "An apparatus, operable with a plurality of remote stations capable of transmission on a shared resource (prgrph [0003]; ll. 24-32), comprising:

a receiver for receiving a plurality of access requests for transmission or the shared resource from a respective plurality of remote stations and for measuring the utilization of the shared resource (prgrph [0003]; ll. 27-32);

a scheduler for allocating a portion of the shared resource to zero or more of the requesting remote stations in response to the plurality of access requests, the allocation comprising zero or one common access grant to a subset of the requesting remote stations (prgrphs [0003]; ll. 27-35 and [0026]; ll. 49-52); and

a transmitter for transmitting the common access grant to the remaining remote stations on one or more common grant channels (prgrph [0015]; ll. 54-58)."

The difference of claim 1 over D1 is to generate and transmit a busy command in response to the measured utilization. However, said busy command is considered to be a standard feature in CDMA networks like the ones disclosed in D1 (prgrph. [0004]), in which networks the Reverse Activity Bit, the Rate Limit, the probability p and the CombinedRABit can be considered to form said busy signal (see for instance D2, p. 3734, left column).

Similar objections apply to independent claims 9, 22, 25, 33 and 46-51. The additional feature of some of said claims, to send said busy signal when a certain threshold is reached, is also disclosed in for instance D2 (p. 3734, left column). Consequently, claims 1, 9, 22, 25, 33 and 46-51 are not inventive over D1.

- 2.2 Dependent claims 2-8, 10-21, 23, 24, 26-32 and 34-45 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, the reasons being as follows:

- It is well known in CDMA2000 networks, to dynamically share the transmission rate between individual, common and autonomous transmission (see D1 (prgrphs [0004],[0023];p. 5, ll.1-4 and [0026]; ll. 49-53) and to send ACKnowledgements for received uplink data transmission (see D1 (prgrph [0037]; ll. 21-30). Consequently, claims 2-4, 10-14, 23-24, 26-28 and 34-38 are not inventive over D1.

- Claims 5-8, 15-21, 29-32 and 39-45 are not inventive over D1 (prgrphs [0023] and [0026]) and D2 (p. 3734, left column).